

(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织
国际局



(43) 国际公布日:
2004年5月6日(06.05.2004)

PCT

(10) 国际公布号:
WO 2004/038570 A1

- (51) 国际分类号: G06F 3/00, H01R 13/52
- (21) 国际申请号: PCT/CN2003/000896
- (22) 国际申请日: 2003年10月24日(24.10.2003)
- (25) 申请语言: 中文
- (26) 公布语言: 中文
- (30) 优先权:
02282360.3 2002年10月25日(25.10.2002) CN
- (71) 申请人(对除美国以外的所有指定国): 互亿科技股份有限公司(BILLIONTON SYSTEMS INC.) [CN/CN]; 中国台湾省新竹市水利路21号, Taiwan (CN).
- (72) 发明人;及
- (75) 发明人/申请人(仅对美国): 梁永昌(LIANG, Yongchang) [CN/CN]; 中国台湾省新竹市民享街173巷47号, Taiwan (CN)。林敏昌(LIN, Min chang) [CN/CN]; 中国台湾省台北市中正区泉州街143号5楼, Taiwan (CN)。林柏宏(LIN, Baihong) [CN/CN]; 中国台湾省高雄市三民区金山路89巷20弄1号, Taiwan (CN)。
- (74) 代理人: 北京北新智诚知识产权代理有限公司(BEIJING BEIXIN-ZHICHENG INTELLECTUAL PROPERTY AGENT CO., LTD.); 中国北京市西城区西直门内南大街16号, Beijing 100035 (CN)。
- (81) 指定国(国家): AE(UM), AG, AL(UM), AM(UM), AT(UM), AU, AZ(UM), BA, BB, BG(UM), BR(UM),

BY(UM), BZ(UM), CA, CH, CO(UM), CR(UM), CU, CZ(+UM), DE(+UM), DK(+UM), DM, DZ, EC(UM), EE(+UM), EG, ES(UM), FI(+UM), GB, GD, GE, GH, GM, HR, HU(UM), ID, IL, IN, IS, JP(UM), KE(UM), KG, KP, KR(UM), KZ(UM), LC, LK, LR, LS(UM), LT, LU, LV, MA, MD(UM), MG, MK, MN, MW, MX(UM), MZ(UM), NI, NO, NZ, OM, PG, PH(UM), PL(UM), PT(UM), RO, RU(UM), SC, SD, SE, SG, SK(+UM), SL(UM), SY, TJ(UM), TM, TN, TR(UM), TT(UC), TZ, UA, UG(UC), US, UZ, VC, VN(PUS), YU(PP), ZA, ZM, ZW

- (84) 指定国(地区): ARIPO专利(+UM)(GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), 欧亚专利(AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), 欧洲专利(AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI专利(UM)(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

UM:实用新型; +UM:专利和实用新型; PP:小专利;
UC:实用证书; PUS:实用方案专利

根据细则4.17的声明:

— 发明人资格(细则4.17(iv))仅对美国

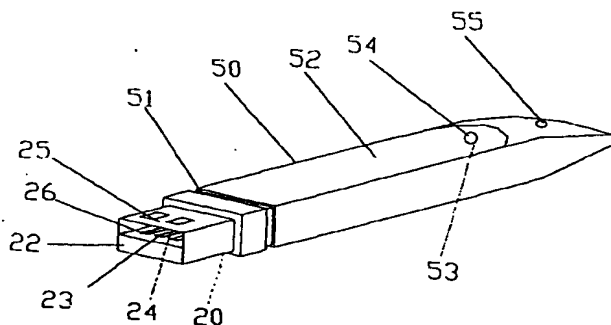
本国际公布:

— 包括国际检索报告。

所引用双字母代码和其它缩写符号, 请参考刊登在每期PCT公报期刊起始的“代码及缩写符号简要说明”。

(54) Title: NFORMATION MEANS WITH WATERPROOF AND TRANSMITTING LIGHT CHARACTERISTIC

(54) 发明名称: 兼具防水和导光性能的资讯装置



(57) Abstract: The utility model provides a information means with waterproof and transmitting light characteristic, the joint forms waterproof characteristics by waterproof member and outer layer, the waterproof cover of the terminal connects the joint and the outer layer, and prevents water leakage, it can be used under the environment of water, acidum and alcali, the waterproof member forms waterproof characteristic and has lucidity transmitting light characteristic, at the same time it can guide the channel of the light and the display of the light, so distinguishing action status at night is provided, and the effect of expediently usage and simply distinguish is achieved.

[续页]

BEST AVAILABLE COPY

WO 2004/038570 A1



(57) 摘要

本实用新型提供一种兼具防水和导光性能的信息装置，通过接头以防水构件、外层形成防水特性，端子的防水套与接头且与外层套合，提供防水渗入、可在含水及酸、碱的环境使用，此防水构件形成防水特性、并具有透明导光特性，同时导引光线的通道、可导引光线显示，提供夜间裸视辨别作动状态，达到多元化方便使用、简易快速辨识的功效者。



PCT

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

(PCT Rule 72.2)

From the INTERNATIONAL BUREAU

To:

BEIJING BEIXIN-ZHICHENG INTELLECTUAL
PROPERTY AGENT CO., LTD
No.16, Xizhimen Nandajie
Xicheng District
Beijing 100035
CHINE

Date of mailing (day/month/year) 02 September 2004 (02.09.2004)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference PCTCN03-55YQ	
International application No. PCT/CN2003/000896	International filing date (day/month/year) 24 October 2003 (24.10.2003)
Applicant BILLIONTON SYSTEMS INC. et al	

1. Transmittal of the translation to the applicant.

The International Bureau transmits herewith a copy of the English translation made by the International Bureau of the international preliminary examination report established by the International Preliminary Examining Authority.

2. Transmittal of the copy of the translation to the elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following elected Offices requiring such translation:

AZ, CA, CH, CO, EP, GH, JP, KG, KP, KR, MK, MZ, RO, RU, TM

The following elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, BA, BB, BG, BR, BY, BZ, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, ES, FI, GB, GD, GE, GM, HR, HU, ID, IL, IN, IS, KE, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MN, MW, MX, NI, NO, NZ, OA, OM, PG, PH, PL, PT, SC, SD, SE, SG, SK, SL, SY, TJ, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report.

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Nora Lindner

Facsimile No. +41 22 740 14 35

Facsimile No. +41 22 338 89 65

PATENT COOPERATION TREATY

PCT

REC'D 22 JUL 2004

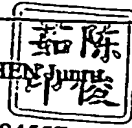
WIPO

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PCTCN03-55YQ		FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/CN03/00896	International filing date (day/month/year) 24.Oct.2003(24.10.03)	Priority date (day/month/year) 25.Oct.2002(25.10.02)	
International Patent Classification (IPC) or national classification and IPC IPC7:G06F3/00 H01R13/52			
Applicant BILLIONTON SYSTEMS INC ETAL			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>3</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> <p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			

Date of submission of the demand 25.May2004 (25.05.04)	Date of completion of this report 24.Jun 2004 (24.06.04)
Name and mailing address of the IPEA/ 6 Xitucheng Rd., Jimen Bridge, Haidian District, 100088 Beijing, China	Authorized officer CHEN Junli 
Facsimile No. 86-10-62019451	Telephone No. (86-10) 62084557

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____ which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ the international application as originally filed/furnished

- ☐ the description:

pages _____ as originally filed/furnished
 pages _____ received by this Authority on _____
 pages _____ received by this Authority on _____

- ☐ the claims:

pages _____ as originally filed/furnished
 pages _____ as amended (together with any statement) under Article 19
 pages _____ received by this Authority on _____
 pages _____ received by this Authority on _____

- ☐ the drawings:

pages _____ as originally filed/furnished
 pages _____ received by this Authority on _____
 pages _____ received by this Authority on _____

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

BEST AVAILABLE COPY

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/CN03/00896

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement:

Novelty (N)

Claims 1-7

YES

Claims

NO

Inventive step (IS)

Claims 1-7

YES

Claims

NO

Industrial applicability (IA)

Claims 1-7

YES

Claims

NO

2. Citations and explanations (Rule 70.7)

Claim 1 relates to a information means with waterproof and transmitting light characteristic.
Documents cited in this International Search Report are:

CN2495017Y

CN1292528A

JP11007993A

JP10223300A

DE20105908U1

DE20208316U1

None of the documents cited in the International Search Report discloses the solution to this problem in Claim 1 of the present application, and the combination of features according to Claim 1 cannot be obviously derived from the available state of the art or from the common knowledge of the person skilled in art, so, Claim 1 meets the requirements of Art.33(2),33(3)PCT.

Claims 2-7 are dependent on Claim 1 and also meet the requirements of Art.33(2),33(3)PCT.